## Amendments to the Claims

Claim 1 (Currently Amended) An optical transmission system, used for radio access for transmitting information between a center station and a subscriber terminal through a radio base station for transmitting and receiving a radio signal to and from an antenna portion, for optically transmitting radio signals bidirectionally by respectively connecting a plurality of radio base stations covering different service areas and the center station through a plurality of optical fibers comprising:

a center station; and

a plurality of radio base stations connected to said center station through a plurality of optical fibers, said plurality of radio base stations each having an antenna portion and covering different service areas for bidirectional communication with subscriber terminals via radio signals, wherein

said center station comprises at least

an electrical-optical conversion portion, receiving one or more baseband signals as one or more modulated electric signals each having a predetermined intermediate frequency, for converting the <u>one or more modulated</u> electric signals into <u>an</u> optical <u>signal signals</u> by intensity modulation,

a local oscillation signal source for outputting a predetermined local oscillation signal,

an external modulation portion for intensity-modulating the optical signal obtained by the conversion in said electrical-optical conversion portion using the <a href="mailto:predetermined">predetermined</a> local oscillation signal outputted from said local oscillation signal source, and

an optical branching portion for branching the optical signal intensitymodulated by said external modulation portion into a plurality of optical signals, and respectively outputting the plurality of optical signals obtained by the branching to the plurality of optical fibers, and

each of said plurality of radio base stations comprises at least

an optical-electrical conversion portion for converting the optical signal transmitted through a respective one of the plurality of said optical fibers fiber into an electric signal in a radio frequency band, and

a band pass filter for extracting only an electric signal component in a desired frequency band from the electric signal obtained by the conversion in said optical-electrical conversion portion, and feeding the extracted electric signal component to said antenna portion.

## Claims 2-5 (Cancelled)

Claim 6 (Currently Amended) The optical transmission system according to claim 1, wherein

the frequencies of the radio signals respectively used in said radio base stations respectively use radio signals of differing are set so as to differ frequencies.

## Claim 7 (Cancelled)

Claim 8 (**Original**) The optical transmission system according to claim 1, wherein the optical signal outputted from said external modulation portion is an optical single-sideband signal with a carrier and a single-sideband component.

Claim 9 (Currently Amended) The optical transmission system according to claim 1, wherein

a Mach-Zehnder type external modulator is used for said external modulation portion is a Mach-Zehnder type external modulator, and a bias point in said Mach-Zehnder type the external modulator is set to a point at which light output power is a the minimum or a maximum so that the optical signal is intensity-modulated by a component which is twice a the frequency of the predetermined said local oscillation signal.

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Claim 10 (Currently Amended) The optical transmission system according to claim 1, wherein

a semiconductor laser for converting an electric signal into an optical signal through direct modulation is used for said electrical-optical conversion portion is a semiconductor laser for converting the one or more modulated electric signals into the optical signal through direct modulation.

Claim 11 (Withdrawn - Currently Amended) The optical transmission system according to claim 10, wherein

the optical fibers are each an optical fiber in which a the wavelength of the optical signal outputted from said electrical-optical conversion portion and a the zero dispersion wavelength almost coincide with each other is used for said optical fiber.

Claims 12-19 (Cancelled)